

ABSTRACT

A catalyst for purifying an exhaust gas includes an upstream side catalyst and a downstream side catalyst. The upstream side catalyst is disposed on an upstream side with respect to an exhaust gas flow, and the downstream side catalyst is disposed on a downstream side with respect thereto. The upstream side catalyst includes a first loading layer, being composed of an alumina containing Ba and La at least, and a first noble metal, being held by the first loading layer and being at least one member selected from the group consisting of Pd, Pd and Rh and Pd and Pt. Alternatively, in addition to the aluminum, the first loading layer can be composed of Ce, a solid solution of Ce and Zr and a solid solution of Ce, Zr and Y in an amount as less as possible. The downstream side catalyst includes a second loading layer, being composed of at least one member selected from the group consisting of an alumina containing La, Ce, a solid solution of Ce and Zr and a solid solution of Ce, Zr and Y, and a second noble metal, being held by the second loading layer and being composed of at least one member selected from the group consisting of Pt, Pd and Rh.